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determining a flow rate for said output oil flow using a difference between said first and second temperature signals; and,

generating a speed control signal for said oil well pump using said flow rate.

16. (New) The method of claim 15 and further including the step of heating a second region of said output oil flow proximate to an other of said first and second temperature sensors.

17. (New) The method of claim 16 wherein said first and second regions are alternately heated.

18. (New) The method of claim 15 wherein said step of heating is performed using a constant current heating element.

19. (New) The method of claim 15 wherein said first and second temperature sensors are platinum resistance-to-temperature (RTD) devices.

20. (New) The method of claim 15 wherein said oil includes crude oil.

21. (New) The method of claim 20 wherein said crude oil includes natural gas and waste materials.

22. (New) The method of claim 15 wherein said flow rate is a rolling average flow rate.

23. (New) The method of claim 22 wherein said step of determining a flow rate is performed using a flow rate look-up table.

24. (New) The method of claim 23 wherein said step of generating a speed control signal is performed using a speed look-up table.